

NOTES FROM 03.23.05 PROTON DRIVER MEETING - CIVIL

Attendees: Mike May, Dixon Bogert, Chuck Federowicz, Lee Hammond, Rod Walton, Bill Foster, Gina Rameika, Duane Plant, Elaine McCluskey

ITEMS DISCUSSED:

1. **L-0 Building and Front End:** Mike showed initial thoughts about layout of equipment for inside L-0 building and in tunnel level under the building and in 1st 150 ft or so of linac enclosure. Open issues:
 - a. Are front end klystrons vertical or horizontal? Need drawing showing klystrons in gallery.
 - b. Should the L-0 building floor above the front end equipment be open, or should this be a floor to help with shielding? If not open, should there be a floor hatch, what should its size be and what floor loading will it need to withstand?
 - c. What are ODH or radiation shielding parameters in the beginning of the machine? Mike proposed a wall in the enclosure between the equipment and where the penetration comes into the enclosure to help with this, if it is a concern.
 - d. Are the 2 beginning klystrons in the enclosure or in the gallery?
 - e. What elevation is the beam in this area?
 - f. What should crane access and capacity and configuration be in L-0? Probably need one if only for off-loading equipment in building. Need dimensions and weights of equipment to be off-loaded in this building.
 - g. What storage is required in this building? Mike has talked to Dan Wolfe, who thought there should be a klystron test area and some room for spares.
 - h. Concluded:
 - i. more investigation is required to address what needs are required for L-0 pertaining to loading, Tech Space, Equipment layout, population during startup, cable counts and spacing.
 - ii. Wave Guides: Optimization of the number and sizes of penetrations is still under discussion.
2. **Space Programming for other Bldgs:**
 - a. Dixon sees no need for people in any bldgs. Buildings would remain semi-unattended during run times
 - b. Building areas need to be sized large enough to support people and equipment/materials during installation.
 - c. L-25 Building would only house people during installation.
 - d. Bill thought some buildings could be used or sized to have available temp storage areas.
 - e. Cryo Building would have a Control Room but not manned during run time.
3. **HVAC:**
 - a. Rad emission from individual air exhausts down length of beamline could be a problem with present ventilation ideas.
 - b. Discussion over amount of individual fan coil units replacing continuous ductwork in tunnel - Lee thought individual fan coil units installed at every active module area could handle ventilation. Air intake would come from MI-8 area with a possible single exhaust at the L-0 Building
 - c. Klystron Gallery ventilation - Same idea as tunnel, with fan coil units placed at every active area.
4. **Burning and Beamline stakeout:** Burn for PD region planned for next week, weather dependent. Stakeout of beamline/road area to follow after burning completed.

ITEMS FOR NEXT MEETING:

- Mike will try to lay out klystrons in the gallery and show associated waveguide penetrations.
- Continue to look at L-0 Building needs and layout
- Look at revising L-25 layout if cavities size changes to 40 ft
- Continue discussions on space programming for all buildings
- Continue discussion on HVAC issues

NEXT MEETING 3/30/05 AT 9:30 A.M. IN THE conFESSional WH5NE